BUREAU OF STATISTICS

ENERGY FACTS

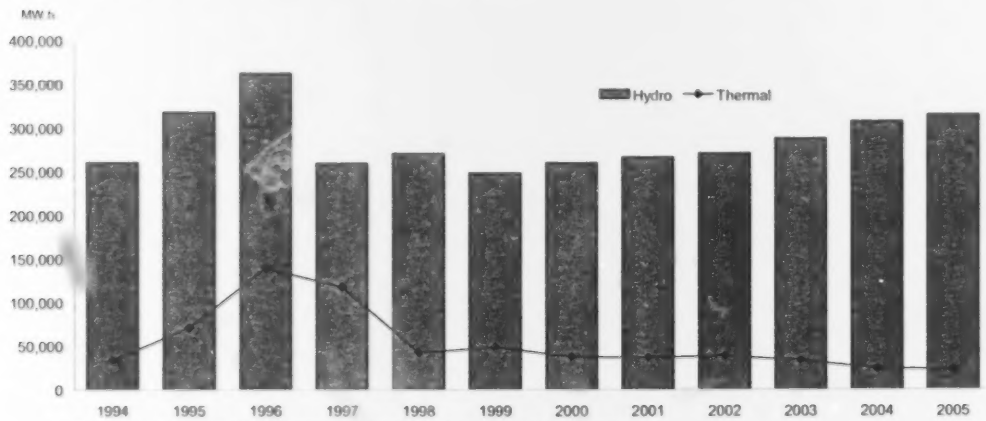
# Yukon Energy Facts

## Electricity – *Generation*

*How much electricity is generated in the Yukon, and who produces it?*

| | YUKON ELECTRICAL COMPANY | | YUKON ENERGY CORPORATION | | | YUKON TOTAL | | |
|---|---|---|---|---|---|---|---|---|
| | HYDRO | THERMAL | HYDRO | THERMAL | WIND | HYDRO | THERMAL | WIND |
| | (MW.h) | | (MW.h) | | | (MW.h) | | |
| 2005 | 6,858 | 21,807 | 307,717 | 580 | 890 | 314,575 | 22,387 | 890 |
| 2004 | 5,799 | 21,988 | 301,038 | 1,705 | 477 | 306,837 | 23,693 | 477 |
| 2003 | 4,948 | 21,512 | 282,391 | 11,354 | 898 | 287,339 | 32,866 | 898 |
| 2002 | 8,118 | 21,824 | 262,259 | 16,176 | 1,087 | 270,377 | 38,000 | 1,087 |
| 2001 | 9,165 | 21,026 | 256,709 | 15,105 | 1,125 | 265,874 | 36,131 | 1,125 |
| 2000 | 6,930 | 20,963 | 252,134 | 16,026 | 394 | 259,064 | 36,989 | 394 |
| 1999 | 4,544 | 20,791 | 242,798 | 27,356 | 267 | 247,342 | 48,147 | 267 |
| 1998 | 5,561 | 20,013 | 264,450 | 21,802 | 259 | 270,011 | 41,815 | 259 |
| 1997 | 6,343 | 21,421 | 252,581 | 95,881 | 226 | 258,924 | 117,302 | 226 |
| 1996 | 6,641 | 20,788 | 355,391 | 118,111 | 221 | 362,032 | 138,899 | 221 |
| 1995 | 7,077 | 17,943 | 310,128 | 52,373 | 227 | 317,205 | 70,316 | 227 |

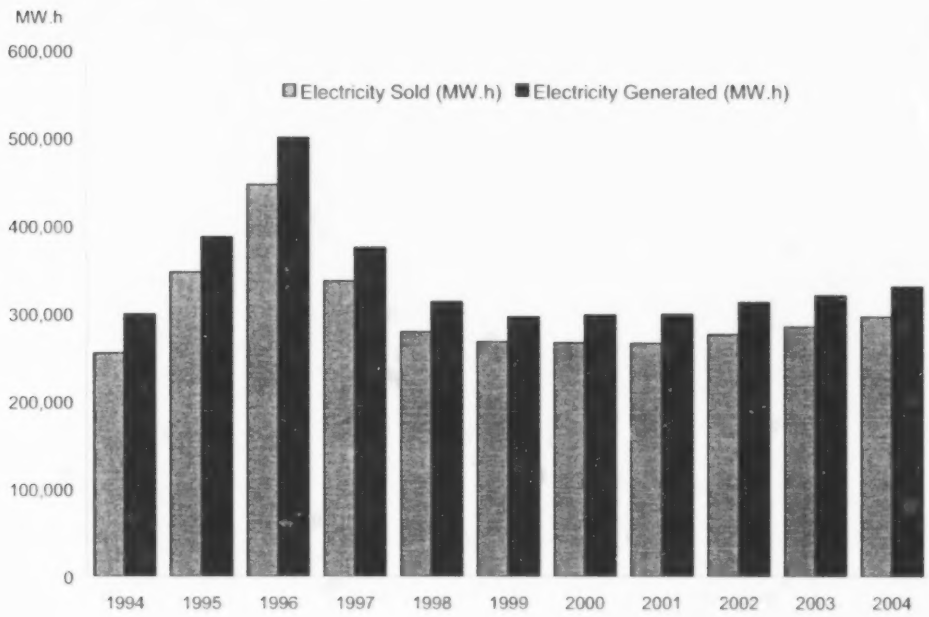
* *Hydro electricity*: Energy produced by utilizing the water flow in a river.
* *Thermal electricity*: Energy produced by generators which run on petroleum products (e.g., diesel).
* *Wind electricity*: Wind generator at Haeckel Hill, Whitehorse, went into service in the fall of 1993. A second wind generator was added in October 2000.




*Source*: Yukon Electric Company and Yukon Energy Corporation.

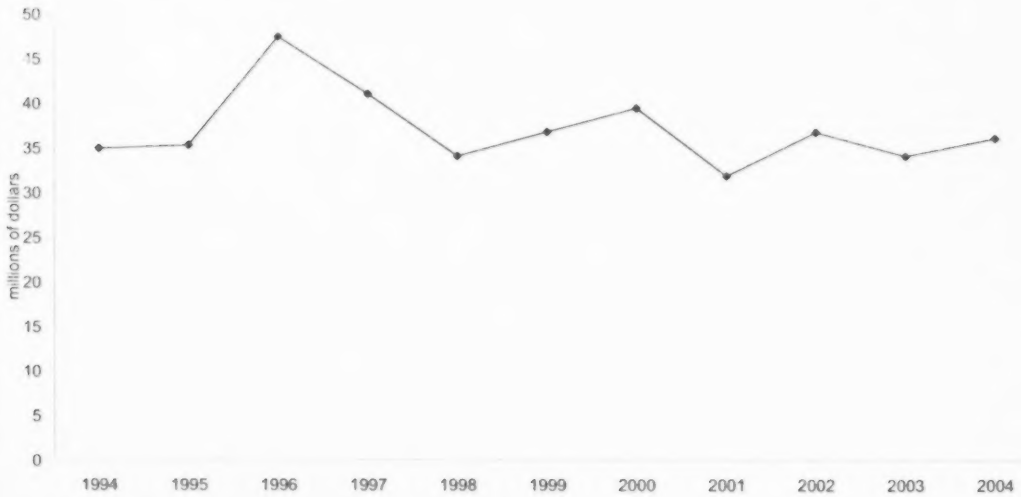
# Electricity – *Consumption*

*How much electricity is generated and sold in the Yukon?*




*Source*: Statistics Canada catalogue no. 57-202

*What is the dollar value of electricity sold in the Yukon?*




*Source*: Statistics Canada catalogue no. 57-202

## Electricity – *Cost*

*How much does the Yukon residential/agricultural sector pay for electricity compared with the rest of Canada?*

| | Average Annual Bill ($) | | Consumption Per Customer (KW.h) | | Cost Per KW.h (cents) | |
|---|---|---|---|---|---|---|
| | **Canada** | **Yukon** | **Canada** | **Yukon** | **Canada** | **Yukon** |
| **2004** | 996.89 | 1,045.19 | 12,312 | 8,874 | 8.10 | 11.78 |
| **2003** (r) | 950.46 | 1,085.77 | 12,288 | 9,290 | 7.73 | 11.69 |
| **2002** (r) | 941.05 | 1,051.87 | 12,125 | 9,339 | 7.76 | 11.26 |
| **2001** (r) | 896.71 | 1,033.32 | 12,011 | 9,352 | 7.47 | 11.05 |
| **2000** | 887.91 | 1,388.28 | 11,950 | 9,761 | 7.43 | 14.22 |
| **1999** | 881.90 | 1,253.84 | 11,996 | 9,702 | 7.35 | 12.92 |
| **1998** | 862.83 | 1,116.12 | 11,786 | 9,564 | 7.32 | 11.67 |
| **1997** | 890.85 | 1,129.73 | 12,339 | 9,815 | 7.22 | 11.51 |
| **1996** | 899.00 | 1,224.82 | 12,579 | 10,604 | 7.15 | 11.55 |
| **1995** | 890.69 | 1,168.79 | 12,308 | 10,095 | 7.23 | 11.57 |
| **1994** | 907.59 | 1,223.57 | 12,570 | 10,349 | 7.22 | 11.82 |

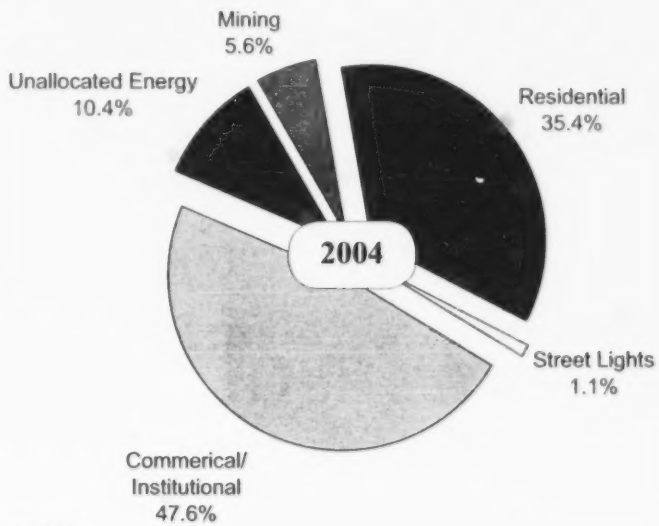
*Source*: Statistics Canada catalogue no. 57-202.

This table shows that the average annual electricity bill in the Yukon was $1,045.19 in 2004, a decrease of $40.58, or 3.7%, from 2003. Comparing the Yukon to Canada, the Yukon average is $48.30, or 4.8%, more than the Canadian average of $996.89. On average, Yukoners consume annually 8,874 KW.h of electricity, 27.9% less than the Canadian average of 12,312 KW.h.

## Electricity – *Distribution*

*Who uses the energy that is produced in the Yukon?*

This chart shows the five main divisions of electrical use in the Yukon. Their consumption is expressed as a percentage of the Yukon total electrical generation of 330,162 MW.h in 2004.




*Source*: Statistics Canada catalogue no. 57-202.

## Refined Petroleum Products

*What are the domestic sales of motor gasoline?*

| MONTH | Total Sales | Regular Unleaded Gas | Mid-grade Unleaded Gas | Premium Unleaded Gasoline | Retail Sales |
|---|---|---|---|---|---|
| **2005** | cubic metres | | | | |
| January | 2,040 | 1,913 | 12 | 115 | 1,128 |
| February | 2,435 | 2,242 | 22 | 171 | 1,346 |
| March | 2,382 | 2,198 | 17 | 167 | 1,317 |
| April | 2,801 | 2,601 | 16 | 184 | 1,711 |
| May | 2,900 | 2,749 | 19 | 132 | 1,772 |
| June | 3,923 | 3,649 | 12 | 262 | 2,396 |
| July | 3,369 | 3,173 | 17 | 179 | 2,304 |
| August | 4,960 | 4,690 | 6 | 264 | 3,392 |
| September | 2,953 | 2,792 | 4 | 157 | 2,019 |
| October | 2,320 | 2,229 | 10 | 81 | 1,637 |
| November | 2,128 | 2,042 | 6 | 80 | 1,502 |
| December | 1,683 | 1,578 | 11 | 94 | 1,188 |
| Total | 33,894 | 31,856 | 152 | 1,886 | 21,712 |

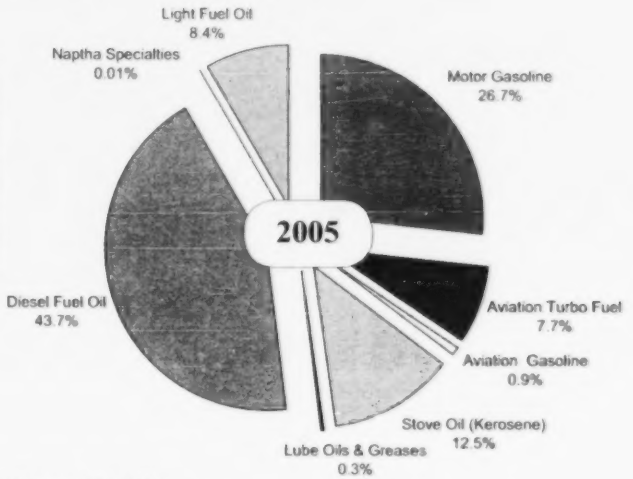
*Note:* Total sales of motor gasoline are the total sales in the Yukon Territory.
Retail sales of motor gasoline represent the sales conducted by retail service stations only.

*Source*: Statistics Canada, CANSIM table no. 134-0004

## Refined Petroleum Products – *Distribution*

*What are the domestic sales of petroleum products?*

This chart shows the distribution of the eight types of petroleum products sold in the Yukon. Each product is expressed as a percentage of the total petroleum distribution of 127,180 cubic metres in 2005.




*Source*: Statistics Canada, CANSIM table no. 134-0004

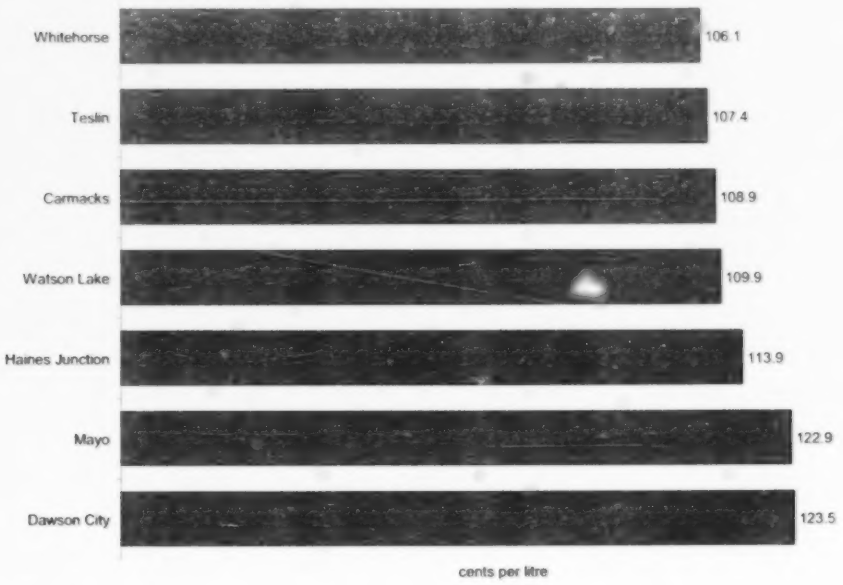
# Petroleum Prices

*What was the average price of regular gasoline and diesel fuel in Yukon communities in December 2005?*

| | --- Full-service Stations --- | | --- Self-service Stations --- | |
|---|---|---|---|---|
| | Regular Gasoline | Diesel | Regular Gasoline | Diesel |
| **Communities** | cents/litre | | cents/litre | |
| Carmacks | .. | .. | 108.9 | 116.4 |
| Dawson City | 110.0 | 125.0 | 123.5 | 126.0 |
| Faro | 117.9 | 125.9 | .. | .. |
| Haines Junction | 110.9 | 107.9 | 113.9 | 117.9 |
| Mayo | 115.4 | 127.4 | 122.9 | 124.9 |
| Teslin | .. | .. | 107.4 | 112.9 |
| Watson Lake | 112.9 | 117.9 | 109.9 | 117.8 |
| Whitehorse | 106.6 | 113.6 | 106.1 | 109.5 |

*Source*: Yukon Bureau of Statistics, *Fuel Survey, as of December 21st, 2005.*

*What was the average price of self-serve regular unleaded gasoline in the various Yukon communities in December 2005?*




*Source*: Yukon Bureau of Statistics, *Fuel Survey as of December 21st, 2005.*

## Per Capita Gasoline Consumption

*How much motor gasoline do Yukoners consume in comparison to the rest of Canada?*

| | Domestic Sales of Motor Gasoline in 2005 | Population in 2005* | Annual Consumption Per Person | Daily Consumption Per Person |
|---|---|---|---|---|
| Canada | 40,839,347 $m^3$ | 32,270,507 | 1.266 $m^3$ | 3.47 litres |
| Yukon | 33,894 $m^3$ | 30,988 | 1.094 $m^3$ | 3.00 litres |

* = population figures are updated postcensal estimates.

This table shows that for 2005, the per capita consumption of motor gasoline in the Yukon was 3.00 litres per day, or 13.5% lower than the national average of 3.47 litres per day.

*Source*: Statistics Canada, CANSIM table no. 134-0004 and 051-0001

## Heating Methods

*What was the principal heating equipment used in Canada in 2004?*

| Estimated No. of Households Reporting | Steam or Hot Water Furnaces | Hot Air Furnaces | Heating Stoves[1] | Electric Heating[2] | Other[3] |
|---|---|---|---|---|---|
| 12,343,000 | 1,614,000 | 6,509,000 | 552,000 | 3,630,000 | 38,000 |
| 100.0% | 13.1% | 52.7% | 4.5% | 29.4% | 0.3% |

1. Heating stoves are localized heating units with no central distribution system to other parts of the house (e.g., oil space heater, gas space heater, wood stoves).
2. Includes permanently installed baseboard electric heating and other types such as floor or ceiling heating wires in all or most rooms.
3. Includes cookstoves and any other type of heating equipment not otherwise listed.

*What was the principal heating fuel used in Canada in 2004?*

| Estimated No. of Households Reporting | Oil or Other Liquid Fuel | Natural Gas | Propane | Electricity | Wood | Other |
|---|---|---|---|---|---|---|
| 12,342,000 | 1,279,000 | 6,126,000 | 122,000 | 4,153,000 | 591,000 | 71,000 |
| 100.0% | 10.4% | 49.6% | 1.0% | 33.6% | 4.8% | 0.6% |

*Source*: Statistics Canada CANSIM, table no. 203-0019.
*Note:* Data may not sum to totals due to rounding.

## Energy Price Index

*How has the price of energy changed since 1992 in Whitehorse and Canada?*

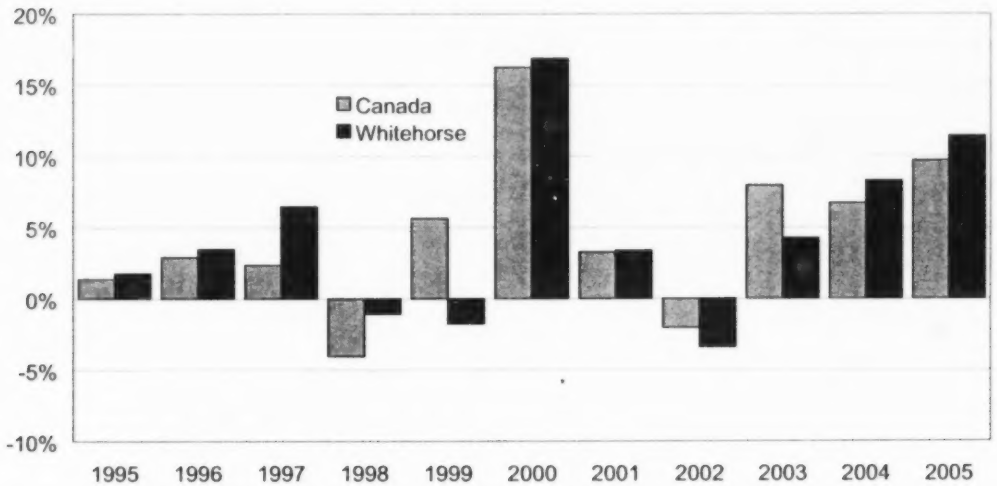
Consumer Price Index
Energy Aggregate, 1992 = 100

| | Canada | Whitehorse |
|---|---|---|
| **2005** | **163.8** | **171.6** |
| 2004 | 149.3 | 154.0 |
| 2003 | 139.9 | 142.2 |
| 2002 | 129.6 | 136.4 |
| 2001 | 132.3 | 141.2 |
| 2000 | 128.1 | 136.6 |
| 1999 | 110.2 | 116.9 |
| 1998 | 104.3 | 119.0 |
| 1997 | 108.7 | 120.3 |
| 1996 | 106.2 | 113.0 |
| 1995 | 103.2 | 109.2 |
| 1994 | 101.8 | 107.3 |
| 1993 | 101.3 | 101.4 |
| 1992 | 100.0 | 100.0 |

*For example*: The consumer price index energy aggregate for Whitehorse for 2005 was 171.6 (1992 =100). This means that energy prices were 71.6% higher in 2004 than in 1992.

*Source*: Statistics Canada CANSIM, Table no. 326-0002.
*Note:* The "Energy Aggregate" includes electricity, natural gas, fuel oil, gasoline and fuel parts/supplies for recreational vehicles.

*By what percentage has the price of energy changed from year to year in Canada and Whitehorse?*




*Source*: Statistics Canada CANSIM, table no. 326-0002.

## Fuel Oil Costs

*How expensive is household heating fuel in Whitehorse compared to other Canadian cities?*

| | Whitehorse | Vancouver | Toronto | Yellowknife |
|---|---|---|---|---|
| | cents per litre | | | |
| **January '06** | **93.6** | **84.9** | **83.4** | **85.4** |
| January '05 | 77.7 | 72.9 | 68.1 | 68.1 |
| January '04 | 64.2 | 60.5 | 58.9 | 55.0 |
| January '03 | 65.2 | 61.2 | 60.9 | 55.9 |
| January '02 | 53.4 | 49.0 | 47.5 | 42.1 |
| January '01 | 65.9 | 61.7 | 64.6 | 56.3 |
| January '00 | 47.4 | 50.4 | 48.0 | 47.7 |
| January '99 | 40.1 | 40.6 | 37.1 | 32.6 |
| January '98 | 46.9 | 43.4 | 42.7 | 37.3 |
| January '97 | 44.7 | 44.1 | 44.4 | 42.4 |
| January '96 | 41.6 | 41.5 | 39.2 | 37.7 |

*Source*: Statistics Canada CANSIM, Table no. 326-0009

This information sheet provides summary statistics on energy consumption, petroleum products and energy costs in the Yukon. Data was collected from a variety of sources, including the Yukon Government and Statistics Canada.

### *LEGEND*

| | |
|---|---|
| KW | Kilowatt = 1,000 watts |
| MW | Megawatt = 1,000,000 watts |
| KW.h | Kilowatt Hour = One kilowatt of power used for one hour. |
| MW.h | Megawatt Hour = One megawatt of power used for one hour. |
| $m^3$ | Cubic metre = 1,000 litres |
| .. | Figures not available |

Information sheet no. 59.09 – Oct. 2006

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